PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Validity and accuracy of maternal tactile assessment for fever in under-five children in North-Central Nigeria: a cross sectional study
AUTHORS	Abdulkadir, Mohammed; Johnson, Wahab; Ibraheem, Rasheedah

VERSION 1 - REVIEW

REVIEWER	WammandaD Robinson Ahmadu Bello University and Ahmadu Bello University Teachinh Hospital, Zaria Nigeria
REVIEW RETURNED	05-Jul-2014

GENERAL COMMENTS	Even though results tend to address the objectives of the study, there are laps in the methodology which can affect the result of the study. At time the mothers were asked to touch their children for tactile fever, the immediate preceding event such as bathing the child, medications taking, time of the day could affect the tactile perception of the mothers. Also the nature of medication the patients are on while on admission could influence the thermometery reading.

REVIEWER	Ughasoro Maduka D. Department of Pediatrics, University of Nigeria, Enugu Campus, Enugu, Nigeria
REVIEW RETURNED	23-Jul-2014

GENERAL COMMENTS	Abstract: Conclusion: The conclusion should be distinct and lack any form of ambiguity. The authors should clearly state whether tactile detection of fever is a valid method or not according to the findings of their study. Limitation: since mothers repeated the temperature assessment, inclusion of babies that were tepid sponged or bathed is not a limitation. Since what mothers assessed were the real body temperature as at the time of the study. Rather what the authors should include as a limitation is excluding mothers that have checked their children's temperature prior to hospital visit. Since one of the literature they cited stated prior body temperature check by mothers which can bias their assessment. Mehtods: The authors should give insight to how sensitivity, specificity and PPV, NPV, positive likelihood ratio, negative likelihood ratio and

	accuracy. The authors should state whether it was verbal or written informed consent was obtained. The social classification method should be mentioned and detailed in the method section. Since axillary temperature was also used, the cut-off should be stated in the method section. Not documenting other associated symptoms was an important omission in this study, since fever rarely present alone. So associating the tactile assessment with other symptoms would have been insightful Results: Table 1 is irrelevant and adds no value to the study. Table 4 what is the relevance of p-value for the gender of the subjects? Discussion: First Paragraph didnot discuss any outocme of the study.

VERSION 1 – AUTHOR RESPONSE

Response to comments of first reviewer: Children that were bathed or tepid sponged were not excluded as this is a practice that is performed by most mothers. However it was identified as a possible limitation of the study. Regarding medications the child is on, we felt that this would not influence the outcome of the study as these medications would alter core, peripheral and skin temperatures to a similar extent. Also, the children were recruited into the study shortly after presentation (as stated in the methods section) and in most cases before any medications were administered in a bid to eliminate medications used as a confounder.

Response to comments of second reviewer:
The conclusion in the abstract has been made more distinct. Babies that were tepid sponged or bathed were considered a limitation because these acts may lower skin temperature while not necessarily reducing core (rectal) temperature in febrile children.
The methods for calculating sensitivity, specificity, positive and negative predictive values, positive and negative likelihood ratios and accuracy have been included in the methods section(page 6)
Written informed consent was obtained and this has been reflected on page 7.
The social classification system used has been described in more details with appropriate references on page 5.
The cut-off for axillary measurements has been included in the methods section on page 6.
Other associated symptoms were not part of the current study hence were not included.
Table 1 has been deleted from the results section.
The other tables were renumbered to reflect the deleted table 1.
The p value for gender in table 4 (now table 3) was put to highlight the possibility of gender of the child being related to ability of the mother to correctly detect fever or otherwise.
Regarding a discussion of the results, this was included in the concluding portion of the first paragraph and it was done this way to provide some initial perspective tot he subsequent discussions of the results.
Reference 13 was brought to 11 and the other references subsequently renumbered.

VERSION 2 – REVIEW

REVIEWER	Wammanda Robinson Ahmadu Bello University Teaching Hospital, Zaria Kaduna state, Nigeria
REVIEW RETURNED	03-Sep-2014

GENERAL COMMENTS	Line 43 Parents were blinded as to the temperature of their children at presentation. How correct is this? mothers will know whether their children were hot at presentation or not. The percetion of the mother of the temperature of their children at presentation definitely will affect their responses. At the time of temperature recording, no details were given with respect to antipyretic medicatiosn received, bathing of these children.

VERSION 2 – AUTHOR RESPONSE

We meant the mothers were not told the temperature of the child at presentation, until after they had made their own assessment. We required them to make an on the spot assessment of the temperature, irrespective of their previous perception. The sentence in the manuscript has been altered to make it more clear.

The inability to exclude children who had been bathed or tepid sponged was identified and presented as a limitation.